



Draft Proposal
Staffing Needs
Chief Kevin Dempsey
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Topics:

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Staffing:

The Sunset Beach Fire Department currently operates from a roster of seventeen firefighters. Fourteen of the seventeen firefighters serve as full time career personnel, operating three separate shifts that provide 24hr/7 days week coverage. Three of the seventeen firefighters serve in a volunteer capacity. The volunteer staff responds to fire calls, vehicle accidents, and water rescues from home by receiving a page from an issued pager. The volunteer staff acts in a support role, such as rehab, traffic control, safety officers, etc. We also retain twelve part time personnel to work in the absence of full time personnel, such as sick time use or vacation. The part time staff does not respond to calls unless they are on duty.

Each shift is staffed with four full time personnel for a 24-hour period. The personnel consist of two company officers, and two firefighter/emergency medical technicians, (one officer and one firefighter/EMT at each station). The Chief and the Deputy Chief work a 40-hour work schedule Monday through Friday. The Chief and Deputy Chief also respond back, often after hours to assist with larger operations and act as additional firefighters if needed. On an average response, the initial engine company responds from station 1 with two firefighters from station 1. The tower responds from station 2 with two firefighters.

Definitions: Shift = 24 hour coverage period, currently with two personnel at each station.

Company = One engine at station 1 (with two firefighters; 1 Engine at Fire Station 2 with two firefighters)

Equipment:

Stations - The Sunset Beach Fire Department operates out of two stations located within the Town of Sunset Beach. However we also provide first due response to an area of Southwestern Brunswick County located off NC 179 between Sunset Beach and Ocean Isle Beach, the back portion of Ocean Ridge, and an area near Bonaparte's which is not located in Sunset Beach's Town limits. Station 2, located at 7149 Old Georgetown Road was opened this past March. Since the opening of station 2, response times have improved an average of 2 minutes.

Equipment-Station 1 currently houses two engines, two utility vehicles, and two rescue boats. Station 2 houses the tower, and two engines. Each engine and the tower has enough firefighting equipment that it currently exceeds the North Carolina Department of Insurance required equipment, such as the amount of hose, tools, and extrication equipment.

Call Volume

The Sunset Beach Fire Department responds to each call we receive. Those calls include, but are not limited to; fires, fire alarms, medical emergencies, vehicle accidents, hurricane response, home inspections, lock outs, elevator problems, animal rescue, animal bites/stings, water rescue, boating accidents, missing persons, power line issues, hazardous material incidents, propane issues, etc. The firefighters have to train constantly to keep up to date with all the different types of incidents. The firefighters have to be ready, 24 hours a day. The following is the Sunset Beach Fire Departments annual call volume since 2008.

| Year | Calls | Full Time Personnel Each Shift |
|------|-------|--------------------------------|
| 2013 | 1241 | 4 |
| 2012 | 1033 | 4 |
| 2011 | 1022 | 4 |
| 2010 | 940 | 3 |
| 2009 | 921 | 3 |
| 2008 | 884 | 3 |

Current Operating Procedures:

Fire – Our current response procedures for fire related calls involves the response of an engine from station 1 with two firefighters and a tower from station 2 with two personnel. With this strategy, our tactics on arrival are not effectively deployed. The company officer must establish command of the incident and create a strategy for the incident. The firefighter will be concentrating on setting the apparatus up for suppression operations, which would include establishing a water supply. With only two firefighters on that first engine, an aggressive attack or search and rescue operations cannot be initiated safely. With this level of initial staffing, we fail to meet the guidelines set forth by OSHA 29 CFR 1910.134(g) (4). In order to be more effective, and operate based on OSHA and NFPA guidelines, we would need to respond with a minimum of four personnel on the initial engine company, which mean we need four on both fire trucks.

Medical –Our current response procedures for medical related calls involves the response of an engine from either station 1 or 2 depending on where the location of the call is. A second engine would only respond if the incident is a cardiac emergency or rescue related where more personnel is needed.

Water Rescue – (beach related incidents) the current response procedures involve the response of a pickup truck with a boat in tow from station 1 with both personnel. Station 2 responds to station 1 and standbys with the other rescue boat. The station 1 crew arrives on scene, assesses the situation, and advises if the other crew needs to respond. In all cases where a rescue boat launches, the second boat responds to the scene. These incidents leave the Town the most vulnerable, because all fire personnel are dedicated to the beach strand.

NFPA and OSHA Standards:

According to NFPA 1710, an engine company is described as a company of a minimum of four personnel with the capability to pump and deliver water, perform basic fire suppression and search and rescue activities (NFPA 1710 5.2.3.1 and 5.2.3.1.1). A ladder company shall have a minimum of four personnel and have the capability to perform a variety of truck functions including forced entry, ventilation, utility control, aerial water delivery application, search, and rescue, illumination, and salvage and overhaul operations (NFPA 1710 5.2.3.2 and 5.2.3.2.1). At this time, we do not meet the minimum standards because we respond with only two personnel on the initial engine company and two personnel on the tower, which minimizes our effectiveness on the initial response. Four is also the minimum that OSHA states must be in place before interior fire suppression or rescue activities can begin, (two in/two out rule).

OSHA dictates specific standards for operating in hazardous environments. In 1971, OSHA established that departments must adopt a respiratory protection program. This program requires departments to establish and maintain a respiratory protection program for all personnel who will wear and operate a respirator. It also specifically addressed the use of a respirator in environments that pose an immediate danger to life or health (IDLH), specifically interior structural firefighting. The standard

further dictates that firefighters operating in IDLH environments must work at a minimum of a two-member team, with a two member minimum team in a standby mode just outside of the IDLH atmosphere ready to perform rescue or assistance. This standard is classified as 29 CFR 1910.134(g) (4).

Effectiveness:

The International City Managers Association (ICMA) performed a study involving staffing issues in nationwide fire departments. They concluded the following:

1- Fire suppression operations have three basic functions: (1) rescue operations; (2) work involving ladder, forcible entry, and ventilation; and (3) the application of water. To raise ladders, ventilate, search, and rescue simultaneously takes quick action by at least four and often eight or more firefighters, with each company under the supervision of an officer.

2- If about 16-trained firefighters are not operating at the scene of a working fire within the critical time period, then dollar loss and injuries are significantly increased, as is fire spread.

3- As firefighting tactics were conducted and judged for effectiveness;

Five member companies were 100% effective

Four member companies were 65% effective

Three member companies were 38% effective

The District Chief's Technical Advisory Committee (DCTAC) conducted a study of the Houston Fire Department, which determined that fire apparatus staffing is an even greater citizen safety issue than a firefighter safety matter. Fire ground effectiveness may be compromised when staffing falls below four firefighters per company. Tests conducted with the Houston Fire Department indicated that staffing below a crew size of four could overtax the operating force and lead to higher losses. The report termed the understaffing situation- (a crisis that demands immediate intervention.) When the number of firefighters on an apparatus is below standard, without eliminating any of the tasks fire departments are to accomplish causes the department to delay some of the required tasks or to try to perform all tasks unsafely with inadequate staff, according to the study.

The study also noted the following:

*"Firefighters working in understaffed environments are too often expected to perform beyond their capabilities."

*Inadequate staffing creates "a cumulative effect" caused by combined delays and lost functions of crews resulting in an even greater loss of overall effectiveness.

*Understaffing increases physiological stress on firefighters, as they try to compensate.

Chief Notes:

Volunteers are hard to find, recruit, and retain. I was directed by the Council to revisit recruiting volunteers. I advertised in the newspaper and met with several communities, all of which equaled negative results. Most of the community is of retirement age and have no interest in getting up at three AM for a fire alarm or a vehicle in the ditch, but these calls must be answered. Each year the volunteer roster has shown a decrease in members, mostly due to retirement and others due to the additional training hours required by the North Carolina Department of Insurance.

The Town Council will need to hire six additional firefighters. For example, we have three shifts called A, B and C. Right now, we have two firefighters at each station for shifts A, B, and C. Each shift works 24 hours on and 48 hours off. Therefore, shift A has two at station 1 and 2 at station 2. One firefighter will need to be added to each station so that 3 firefighters will be at each station each shift.

In conclusion, with the hiring of additional firefighters, operations would be able to commence as soon as a unit arrives on scene. The officer would be able to act as an officer, and focus on safety and performing the tasks. Please consider this proposal as a goal, with the goal being four personnel on the Engine and four personnel on the Tower. Thank you for your consideration.